

Composite Spherical Bearings

TriboTex 7 and TriboGlide 15

ACM Composites have been developing, manufacturing and supplying highly engineered composite spherical bearings to the marine, industrial, and civil engineering markets worldwide for many years. ACM material offers significant advantages over metallic and other non - metallic bearings because of their ability to be used in difficult environmental and service conditions.

ACM spherical bearings can be employed in applications under dry or partial lubrication, aggressive process conditions and where shock loads are present. Our complete range of spherical bearings, up to 750 mm diameter, can be a direct replacement for conventional steel spherical bearings or be designed to suit individual customer requirements. We can offer a composite housing with a composite ball or a composite housing with a stainless steel ball depending upon the loads involved.

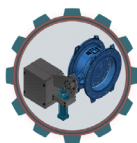
As a world class supplier ACM Composites offers a professional service with technical support from their experienced team of plastic technologists/application engineers including, design recommendation, technical proposals and quotation, machining recommendations and bearing installation assistance.

Advantages in using ACM materials

- ▲ Competitive price
- ▲ Shaft friendly/mating surfaces
- ▲ Excellent corrosion resistance
- ▲ Very low swell characteristics
- ▲ Very low friction during start up
- ▲ Stock / Short delivery time
- ▲ Excellent shock resistance
- ▲ Good elasticity
- ▲ Good dimensional stability
- ▲ Low wear rate – long life

Applications

- ▲ Earth moving equipment
- ▲ Off-road vehicles
- ▲ Cranes
- ▲ Hydraulic cylinder eye end
- ▲ Rudders
- ▲ Water treatment equipment



HYDRATECH PTY LTD
acm COMPOSITES



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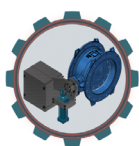
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Material/Design Specification

Property	Unit	TriboTex 7	TriboGlide 15
Compressive strength (normal)	MPa	375	375
Compressive modulus (normal)	MPa	2,750	2,750
Impact strength (normal)	kJ/m ²	100	100
Density	g/cm ³	1.30	1.30
Hardness	Rockwell M	100	100
Coefficient of friction (dry)	-	0.13 – 0.15	0.07 – 0.12
Maximum operating temperature	°C	130	130
Minimum operating temperature	°C	-40	-40
Thermal expansion coefficient (parallel)	/ °C	5 x 10 ⁻⁵	6 x 10 ⁻⁵
Thermal expansion coefficient (normal)	/ °C	10 x 10 ⁻⁵	12 x 10 ⁻⁵
Swell in water	%	< 0.15	< 0.20

(nominal values)



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